

WHAT IS CLAIMED IS:

1. A multi-wavelength laser device comprising at least two of a blue laser diode, a red laser diode, and an infrared laser diode, which are arranged in the same direction on the same base, wherein
laser light emission points of the diodes are arranged with one
5 behind another in a light emitting direction in increasing order of wavelengths of the laser diodes.
2. The multi-wavelength laser device according to claim 1, wherein
said at least two laser diodes are formed monolithically on the same substrate.
3. The multi-wavelength laser device according to claim 1, wherein
said at least two laser diodes are mounted on said base using respective solders with different melting points.
4. The multi-wavelength laser device according to claim 1, wherein
said base is provided with a cut for ensuring passage of laser light from each of said laser diodes.
5. The multi-wavelength laser device according to claim 2, wherein
said substrate is provided with a cut for ensuring passage of laser light from each of said laser diodes.
6. The multi-wavelength laser device according to claim 1, wherein
each of said diodes is mounted with its p-side down.

7. A method of manufacturing the multi-wavelength laser device of claim 1, wherein

5 said at least two laser diodes are mounted on said base using
solders with respective different melting points in decreasing order of the
melting points.